A Unified Framework for Digital Image Processing in Computer Vision and Remote Sensing

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Akarsh Seggemu

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2 System Overview

3 Implementation

4 Time Schedule

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Gitlab
Gitlab Issues
Gitlab Merge Requests

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Gitlab

- A private and free Github
- Share and version code

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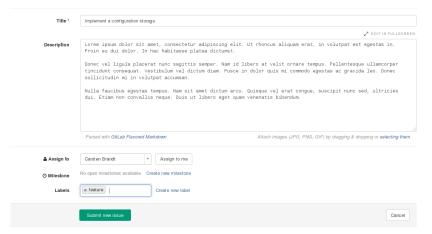Time Schedule

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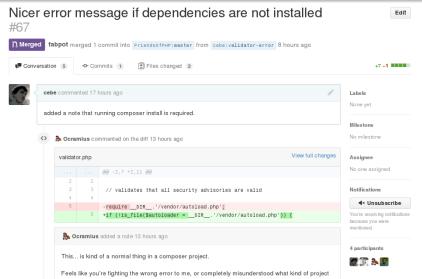- Share and version code
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Gitlab Issues

New Issue

Title *	Implement a configuration storage

↗ EDIT IN FULLSCREEN

Description

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut rhoncus aliquam erat, in volutpat est egestas in. Proin eu dui dolor. In hac habitasse platea dictumst.

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Parsed with GitLab Flavored Markdown.   *Attach images (JPG, PNG, GIF) by dragging & dropping or selecting them.*

👤 **Assign to**   Carsten Brandt   ▾   Assign to me

⊘ **Milestone**   No open milestones available.   Create new milestone

Labels   [× feature |]   Create new label

Submit new issue   Cancel

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Gitlab Merge Requests

- Work on branches
- never push to master directly

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Requirements

- Plattform independent with linux as primary target
- GUI and Command-line mode

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Framework
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Configuration Storage
Modules

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Framework

Functionality:

- load/save chain config
- run chain
- sanity check of chain before run

GUI

GUI Elements Functionality:

- load/save chain config
- add/rm modules
- link/unlink modules
- run chain
- sanity check of chain before run
- display logging information

Configuration Storage

Requirements:

- read and writeable by human and machine
- ideally simpler than XML

Modules

Modules provide the processing functionality of the framework.

Consists of

- a meta information file
- a library file

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Basic interface:

```
1  void run (vector input, vector output, Context context)
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- input and output are std::vector of resources described in module meta description

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    - write to logger
    - open windows
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Implementation

- Language: C++11
- Build Tool: CMake
- Libraries: OpenCV, Qt

Raw Class Model

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Milestones

1st	26.05.2015	Core Framework Basics and Configuration
2nd	09.06.2015	Basic Modules
3rd	23.06.2015	GUI
4th	07.07.2015	Working framework 1.0
	14.07.2015	Final Presentation